

CLAIMS

1. A memory unit composed substantially of organic material,
wherein the storage function of the component is achieved
5 due to an organo-resistive material being embedded in an electrolyte.
2. A memory unit as defined in claim 1, wherein said organo-
resistive material is separated from a conductive material
10 by an electrolyte so that the flow of ionic current through the electrolyte due to application of a voltage to the conductive material causes a readable change in the conductance and/or color of the organo-resistive material.
- 15 3. A memory unit as defined in claim 1 or claim 2, wherein the organo-resistive material is disposed in structured form on a substrate.
- 20 4. A memory unit as defined in any one of the previous claims, wherein said organo-resistive materials are based on conjugated chains.
- 25 5. A memory unit as defined in any one of the previous claims, wherein the electrolyte is water-based and/or solid.
6. A memory unit as defined in any one of the previous claims, wherein the organo-resistive material and/or a mixture of said materials is/are soluble and can be proc-
30 essed in solution.
7. Electronics circuitry for a memory unit, wherein the circuit arrangement is provided between a ground and a supply

voltage and comprises at least one resistor, an organo-resistive conductive element, embedded in an electrolyte, and a control electrode.

- 5 8. Electronics circuitry as defined in claim 7, wherein the design of the memory unit provides a matrix arrangement for achieving a higher storage density.